

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A polymer composition with elastomeric properties at wide temperature ranges of a type comprising polymers and/or copolymers resulting from substituted or unsubstituted vinyl aromatic monomers and from dienic monomers, which comprises from 15 to 85% by weight of a copolymer containing at least one block from 10 to 5000 mainly syndiotactic structural sequences of monomer units resulting from at least one substituted or unsubstituted vinyl aromatic monomer, and at least one block formed by 10 to 4000 monomer units resulting from at least one dienic monomer having mainly a 1,4-cis structure; from 15 to 85% by weight of a polymer resulting from dienic monomers having a molecular weight between 6000 and 600000, wherein the contents of 1,4-cis monomer units is of at least 90%; and up to 70% by weight of a polymer resulting from substituted or unsubstituted vinyl aromatic monomers having a molecular weight between 10000 and 500000 and a degree of syndiotacticity in terms of syndiotactic pentads of at least 95%.

2. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1,

wherein vinyl aromatic monomers are selected from styrene and substituted styrene.

3. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 2, wherein the vinyl aromatic monomer is substituted styrene whose substituents are selected from alkyl, halide, alkoxy, and amine groups.

4. (Previously presented) The polymer composition with elastomeric properties at wide temperature ranges according to claim 2, wherein the vinyl aromatic monomers are selected from styrene, 4-methyl styrene, 4-ter-butyl styrene, 4-methoxy styrene, 4-trimethylsililoxy styrene, 4-bromo styrene, and 4-(N-N-dimethyl amine)styrene.

5. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1, wherein the dienic monomer is selected from buta-1,3-diene and 2-methyl buta-1,3-diene.

6. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1, wherein the fraction formed by the monomer units resulting from the dienic monomer is partially or fully hydrogenated.

7. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 6,

wherein the fraction formed by the monomer units resulting from the dienic monomer is hydrogenated by 95%.

8. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1 further containing from 0.01 to 4% by weight of at least one organic or inorganic additive.

9. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 8, wherein the inorganic additive is selected from compounds containing aluminum.

10. (Previously presented) The polymer composition with elastomeric properties at wide temperature ranges according to claim 9, wherein the compounds containing aluminum are selected from aluminum oxide or compounds with the general formula $(-\text{Al}(\text{X})\text{O}-)_n$, wherein X is selected from the group consisting hydroxyl, alkoxide, and alkyl groups and n is a natural number.

11. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 10, wherein $(-\text{Al}(\text{X})\text{O}-)_n$ results from making react the compounds with the general formula $(-\text{Al}(\text{R})\text{O}-)_m$ with water or alcohols, wherein R is an alkyl group and m is a natural number.

12. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 8, wherein the organic additive is at least an antioxidant agent.

13. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 12, wherein the antioxidant agent is selected from those containing phenols, phosphates, and amines.

14. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1 further exhibiting a first glass transition temperature (T_g 1) within the temperature range from -148 °F and -130 °F.

15. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1 further exhibiting a second glass transition temperature (T_g 2) within the temperature range from 203 °F to 248 °F.

16. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1 further exhibiting a melting temperature T_m within the temperature range from 428 °F to 572 °F.

17. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1, wherein the elastomeric behavior of such a polymer composition

extends from -121 °F to the degradation temperature of the monomer units resulting from the dienic monomer.

18. (Previously presented) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1, wherein the modulus of elasticity of such a polymer composition ranges between 10 and 1000 Mpa within the temperature range from -121 °F to 194 °F.

19. (Original) The polymer composition with elastomeric properties at wide temperature ranges according to claim 1, wherein the modulus of elasticity of such a polymer composition ranges between 3 and 100 Mpa within the temperature range from 248 °F and the dienic polymer degradation temperature.

20-44. (Cancelled)